PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION See Form PCT/IPEA/416	
030156PC		
International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/SE2004/001243	30-08-2004	03-09-2003
International Patent Classification (IPC) or national classification and IPC		
See Supplemental Box		
Applicant		
Tagmaster AB et al		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
   a. ☒ *(sent to the applicant and to the International Bureau)* a total of 3 sheets, as follows:
      ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
      ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
   b. ☐ *(sent to the International Bureau only)* a total of (indicate type and number of electronic carrier(s))
      _____, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items:
   - ☒ Box No. I Basis of the report
   - ☐ Box No. II Priority
   - ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   - ☐ Box No. IV Lack of unity of invention
   - ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
   - ☐ Box No. VI Certain documents cited
   - ☐ Box No. VII Certain defects in the international application
   - ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand	Date of completion of this report
30-03-2005	01-12-3005
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. +46 8 667 72 88	Authorized officer Gordana Ninkovic/MN Telephone No. +46 8 782 25 00

Form PCT/IPEA/409 (cover sheet) (April 2005)

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of: Cover sheet

G08G 1/0967 (2006.01)

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/SE2004/001243

Box No. I Basis of the report

1. With regard to the **language**, this report is based on:

☒ the international application in the language in which it was filed

☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of:

☐ international search (Rules 12.3(a) and 23.1(b))

☐ publication of the international application (Rule 12.4(a))

☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))

2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

☐ the international application as originally filed/furnished

☒ the description:

pages 1-9 as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

☒ the claims:

pages _____ as originally filed/furnished

pages* _____ as amended (together with any statement) under Article 19

pages* 1-3 received by this Authority on 10-10-2005

pages* _____ received by this Authority on _____

☒ the drawings:

pages 1-4 as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages _____

☐ the claims, Nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing *(specify)*: _____

☐ any table(s) related to the sequence listing *(specify)*: _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages _____

☐ the claims, Nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing *(specify)*: _____

☐ any table(s) related to the sequence listing *(specify)*: _____

* *If item 4 applies, some or all of those sheets may be marked "superseded."*

Box No. V **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1-7	YES
	Claims		NO
Inventive step (IS)	Claims	1-7	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-7	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

Documents cited in the International Search Report:

A US 6442394 B1 (Valentine et al), 27 August 2002
B US 2002036571 A1 (Takahashi et al), 28 March 2002
C WO 0070504 A2 (F.Herz), 23 November 2000
D WO 0217141 A2 (Chang et al), 28 February 2002
E JP 11088553 A (Daihatsu Motor Co Ltd), 30 March 1999

In a view of new claims amended at 10-10-2005 documents A-C are reconsidered to represent the state of the art, together with documents D-E.

Present invention relates to a method of transmitting geographically governed information to vehicles or to individuals, depending on the location of said vehicle or individual.

Document A discloses a method and a system for conveying geographically governed traffic information to a mobile telephone. Approximate position of the mobile telephone is determined and forwarded to a computer. The computer is provided with a database comprising the traffic information, from where it can retrieve roadway information associated with the geographic area within which the mobile telephone is located and send the information wirelessly to the mobile telephone. (See column 5,line 4-24).

.../...

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of: Box V

Document B discloses an information exchange system for conveying geographically governed information to a vehicle. The vehicle is provided with a transponder, which communicates with permanently spaced units, located along the road. When the vehicle passes the road-side unit, the transponder transmits geographically governed information to the vehicle. (See the abstract).

Document C discloses also a system for conveying geographically governed information to a vehicle, where the identification and location of the vehicle is obtained by license-plate scanning with cameras. (See the abstract).

However, none of the cited documents discloses a method of transmitting geographically governed information to vehicles or to individuals, where position and direction of movement is determined by at least two of permanently spaced units located after each other.
In view of the cited documents such a method cannot be considered obvious to a person skilled in the art.

Therefore the invention claimed in claims 1 - 7 is novel and considered to involve an inventive step.

The invention is regarded to be industrially applicable.

CLAIMS

1. A method of transmitting geographically governed information to automotive vehicles or to individuals, depending on the location of said vehicle or individuals, where the exact or approximate position of the vehicle or the individual is determined in relation to permanently spaced units (10-12; 20-22;30-32) for radio communication between said units and a vehicle-carried or an individual-carried communication unit (6,8,9;26,28,29;36,38,39), where a computer (7) and associated database (16) is caused to contain information which includes different data relevant to different geographical areas, **characterised in that** said computer (7) is caused to send said relevant information to a receiving unit (14;15;26-29) in each and every one of those vehicles or individuals in question whose positions and direction of movement by at least two of said permanently spaced units located after each other have been determined and in accordance with the geographical area in which the vehicle or the individual are located and in that said receiving unit is a mobile telephone (15) or a computer (4) adapted to receive a signal sent via a mobile telephone network and also adapted to receive said information in the form of an SMS-message, an MMS-message, an E-mail message, or a voice message.

2. A method according to Claim 1, **characterised by** equipping each vehicle or each person with a communications unit in the form of a transponder (6,8,9) that can be read by means of said permanently spaced units in the form of a communicator that includes a transceiver unit (10,11,12), said communicator being caused to send an inquiry signal to the transponder, wherewith the transponder (6,8,9) answers the inquiry signal and is therewith caused to transfer the trans-

ponder-related identification information to the communicator, which is caused to receive this information; by placing communicators (10-12) along stretches (40-44) of road or at places located in various geographical areas in which it is desired to present said information, wherein each communicator (10-12) that reads a transponder (6,8,9) is caused to send said identity information to said computer (16), and wherein said geographically governed information is then sent to said vehicle-carried or individual-carried mobile telephone or computer (14;15;26-29).

3. A method according Claim 2, **characterised by** determining the approximate position of the vehicle or of the individual and the travelling direction when the vehicle or the individual-carried transponder (6,8,9) has been read by two or more mutually sequentially located communicators (10-12).

4. A method according to Claim 2 or 3, **characterised** in the transponder (6,8,9) is a so-called RFID-transponder.

5. A method according to Claim 1, **characterised by** equipping/providing each vehicle or individual with said communications unit in the form of a mobile telephone (26, 28,29) and establishing the approximate position of said telephone through the medium of said permanently placed units in the form of base stations belonging to a mobile telephone system, wherein information relating to the position of each mobile telephone (26,28,29) identified by a respective base station is caused to be transferred to said computer (16), and wherein said geographically governed information is then caused to be sent to said mobile telephone (26,28,29) or computer (16) carried by the vehicle or said individual and

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by determining the approximate position of the mobile telephone (26,28,29) and the travelling direction when the mobile telephone is in an area covered by a base station after having been located within the area covered by an adjacent preceding base station.

6. A method according to Claim 1, 2, 3, 4 or 5, **characterised by** sending some of said geographically governed information to respective receiving units (14; 15; 26-29) only at given time intervals.

7. A method according to Claim 1, 2, 3, 4, 5 or 6, **characterised by** sending some of said geographically governed information to respective receiving units (14;15;26-29) only once or only a predetermined number of times.